

[Assembly Bill 1442](#) (O'Donnell and Brough)

Date: 05/11/15

Program: Fuel Taxes

Sponsor: California Independent Oil Marketers Association (CIOMA)

Revenue and Taxation Code Sections 7318 and 8651.8

Effective: January 1, 2016

Michele Pielsticker (Chief) 916.322.2376

John Cortez (Analyst) 916.445.6662

Patrick Alessandri (Revenue) 916.445.0840

This analysis only addresses the provisions that impact the Board of Equalization (BOE).

Summary: Increases the allowable percentage of gasoline blended into E85¹ from 15% to 21%, aligns the definition of gasohol, and imposes the \$0.09 excise tax on that newly established “blended ethanol fuel.”

Summary of Amendments: The amendments since the previous analysis redefine gasohol and impose a \$0.09 excise tax rate on “blended ethanol fuel,” a newly defined use fuel.

Purpose: To provide incentives to produce fuel products with lower emissions and carbon intensity.

Fiscal Impact Summary: Revenue loss of \$228,000 annually, due to increased refunds and foregone motor vehicle fuel tax revenues.

Existing Law: Under current law the state imposes an excise tax of \$0.18 per gallon on use fuels.² The law defines “fuel”³ to include any combustible gas or liquid used in an internal combustion engine for propulsion on the highway except fuel taxed as a motor vehicle fuel (gasoline) or diesel fuel.⁴

The Use Fuel Tax Law (UFTL) sets the excise tax rate for ethanol and methanol containing not more than 15 percent gasoline and sets the excise tax rate at one half the \$0.18 rate specified in Section 8651 (\$0.09). The Motor Vehicle Fuel Tax Law (MVFTL) defines “gasohol” as a blend of gasoline and ethanol that contains more than 15% gasoline.⁵ Although the use fuel tax is imposed on the use of the fuel, the vendor who sells or delivers such fuel into a fuel tank is required to collect the tax from the user and provide a receipt.⁶ Users are required to file tax returns and pay taxes owed on fuel used in a taxable manner for purchases not previously taxed.

Under the MVFTL, the state imposes an excise tax of \$0.30 per gallon⁷ (\$0.18 excise tax and \$0.12 surtax) on the removal of gasoline (except for aviation gasoline) at the refinery or terminal rack, upon entry into the state, and upon sale to an unlicensed person. Refund of the excise tax paid on gasoline is allowed under certain circumstances to certain persons.⁸ For claims filed on and after January 1, 2011, a gasoline tax refund is allowed to any person who buys and uses gasoline for the purpose of producing a blended fuel that is used to operate a motor vehicle on the state’s highways when that blended fuel is taxed as a use fuel.⁹

Proposed Law: This bill amends RTC Section 7318 to change the definition of gasohol and amends Section 8651.8 to increase the allowable percentage of gasoline blended into E85, from 15% to 21%.

¹ E85 is not a defined fuel, but is an ethanol and gasoline blend and is the most predominant blended fuel under the Use Fuel Tax Law (UFTL). The term “E85” is used as an example of a blended alcohol fuel for reader convenience.

² UFTL, Part 3 (commencing with Section 8601) of Division 2 of the Revenue and Taxation Code (RTC)).

³ UFTL Section 8604.

⁴ Motor Vehicle Fuel Tax Law (MVFTL), Part 2 (commencing with Section 7301), and the Diesel Fuel Tax Law (DFTL), Part 31 (commencing with Section 60001), of Division 2 of the RTC.

⁵ MVFTL Section 7318.

⁶ UFTL Section 8732.

⁷ For FY 2015-16, the gasoline excise tax rate is set at \$0.30 per gallon.

⁸ MVFTL Section 8101.

⁹ SB 1485 (Ch. 493, Stats. 2012).

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.

In addition, Section 8623 is added to create a new “blended ethanol fuel” subject to the \$0.09 use fuel tax rate. “Blended ethanol fuel” is defined as a fuel blend consisting of ethanol and gasoline that meets one of the following requirements:

- Contains not more than 21% gasoline.
- Contains not more than a percentage of gasoline as specified by board regulation that is consistent with the E-85 Fuel Ethanol Specifications of Section 2292.4 of Title 13 of the California Code of Regulations.

As a tax levy, this bill becomes effective immediately.

In General. Under the UFTL, vendors and users are required to have permits with the BOE and file returns.¹⁰ Use fuel vendor responsibilities include reporting and paying the use fuel tax on alcohol fuels, including E85, delivered into motor vehicle fuel tanks. The vendor is required to collect and remit to the BOE the \$0.09 per gallon use fuel tax on the full volume of E85 sold or dispensed from a retail pump. In contrast, the blenders (producers of blended use fuel) are not required to have special permits from the BOE if they produce an alcohol fuel containing 15 percent or less gasoline or diesel fuel, whether the alcohol fuel is produced within a petroleum terminal or below the rack.

The BOE handles various gasoline tax administrative functions including, but not limited to: registration, licensing, return processing, auditing, and appeals. The State Controller’s office (SCO) is responsible for the collection of delinquent gasoline taxes and issuance of excise tax refunds for gasoline not used on highway. The gasoline tax collection point is different from the use fuel tax; the gasoline tax is generally collected high up the distribution chain at the terminal “rack” level.¹¹

Alcohol fuel blends are the result of blending two components, ethanol or methanol fuel and gasoline or diesel fuel. E85 fuel is a product of blending ethanol fuel and gasoline. The blending location has an effect on the gasoline tax. Currently, alcohol fuel blended with more than 15% gasoline at the terminal is a use fuel upon removal at the rack and the total blended volume is subject to the use fuel tax at the time the fuel is placed into the fuel tank of a motor vehicle.

When the E85 is blended below the rack, the two component fuels are purchased separately and the gasoline tax will have been paid at the “rack” and passed on by the supplier. The resulting blended alcohol fuel (E85 fuel) is then subject to the use fuel tax on the full volume, which includes the tax-paid gasoline.

Background: Current Air Resources Board (ARB) regulations¹² specify that the minimum allowable percentage of ethanol for E85 is 79 percent. The current specifications for E85 according to the California Division of Measurement Standards¹³ reference the ASTM International (f.k.a. American Society for Testing and Materials), specification, “Standard Specification for Fuel Ethanol (Ed75-Ed85) for Automotive Spark-Ignition Engines D5798.”¹⁴ The ASTM standard covers a fuel blend of denatured ethanol and 15 to 25 additional hydrocarbons for use in spark-ignition automobiles.

¹⁰ A “vendor” includes every person who sells fuel in this state and places, or causes to be placed, the fuel into any receptacle on a motor vehicle from which fuel is supplied for the propulsion of the vehicle.

¹¹ The terminal rack level is a level in the distribution chain at a refinery or a storage and distribution facility at the end of a pipeline where gasoline is delivered through a mechanism (the “rack” as it leaves the refinery or storage facility) into ground transportation, such as a truck, trailer, or railroad car.

¹² Section 2292.4, Specifications for E-85 Fuel Ethanol, Article 3 of Chapter 5 of Division 3 of Title 13 of the California Code of Regulations.

[https://govt.westlaw.com/calregs/Document/ID7F07C10D46911DE8879F88E8B0DAAAE?viewType=FullText&originalContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/ID7F07C10D46911DE8879F88E8B0DAAAE?viewType=FullText&originalContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

¹³ Section 4146, Specifications – E85 Fuel Ethanol, Article 5 of Chapter 6 of Division 9 of Title 4 of the California Code of Regulations. http://www.cdfa.ca.gov/dms/programs/general/2015DMS_FldRefMan/122015FRMCh6-4100-4081Part12.pdf

¹⁴ ASTM D5798-14, Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Automotive Spark-Ignition Engines, ASTM International, West Conshohocken, PA, 2014, www.astm.org. See this link for an abstract: <http://www.astm.org/Standards/D5798.htm>

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.

In 1981 the Legislature passed two bills that moved the alcohol fuels from the MVFTL to the UFTL,¹⁵ and imposed a tax at one-half the rate imposed on other use fuels.¹⁶ The BOE-sponsored bill moved alcohol fuels to the UFTL which provided a distinct difference between gasoline/gasohol and the alcohol fuels. At that time, alcohol fuels were not primarily used by motor vehicles, but by farmers. The farmers were licensed as motor vehicle fuel distributors and filed monthly returns, but they only paid small amounts of tax since most of the alcohol use was off-highway. Additionally, alcohol fuels not used in a motor vehicle were entitled to refund. By moving the alcohol fuels to the UFTL the tax was imposed on the use in a motor vehicle, rather than on distribution.

According to the BOE bill analysis, the proponents of the ethanol fuel reduced rate contend that an equivalent amount of alcohol fuel had one-half the British Thermal Units (BTUs)¹⁷ of gasoline and therefore should be taxed at one-half the rate. In 1993 the reduced tax rate was made permanent and the legislative committee analysis noted the same argument; ethanol and methanol BTU content is about one-half that of gasoline.¹⁸

Commentary:

1. **Effect of the bill.** By increasing the allowable percentage of gasoline blended into E85, from 15% to 21%, the resulting blend would be taxed at a lower rate than is currently imposed on the gasoline portion. This bill also creates a new “blended ethanol fuel” taxed at \$0.09 per gallon.
2. **The May 11, 2015 amendments** delete retroactive provisions that applied the 21% blending rate beginning January 1, 2013. **The May 5, 2015 amendments** established blended ethanol fuel as a new use fuel subject to the \$0.09 use fuel tax rate. The amendments also applied the 21% allowable blending percentage retroactively to January 1, 2013.
3. **BOE audit functions may have to expand.** BOE’s UFTL duties include registration, returns, collection, audits, and refunds. The proposed “blended ethanol fuel” definition provides a process to increase the blending percentage of gasoline and ethanol through the BOE’s regulatory process, to a percent that is consistent with ARB’s E85 regulation. Currently, the ARB’s E85 blending percentage allows for a minimum ethanol content of 79%, which prompted this legislation to increase the allowable ethanol blend of up to 21% gasoline. However, a future change to the ARB regulation could result in an ethanol fuel blend of a specified percentage of gasoline to another measure of E85. If that other measure was changed to the ASTM E85 standard, then the blended ethanol fuels could range from 51% to 83% ethanol fuel content.¹⁹

The BOE does not currently verify the blended percentages of ethanol fuels on a reporting function level. During an audit, BOE staff rely on various sources, including specification sheets and fuel industry invoices and statements. Auditors verify that the correct fuel tax is imposed on the correct fuel product. BOE audit staff are concerned that if the amount of gasoline blended into alcohol fuel significantly increases it may provide incentives to misclassify fuel products. In the future, if the gasoline percentage increases, then the difference between E85 and gasohol could be blurred and BOE may need to expand audit functions given the significant tax differences.

4. **The SCO administers the specific gasoline tax refund provisions.** The refund of the gasoline tax for purposes other than operating a vehicle on the state’s public highways and other exempt uses is administered by the SCO.

¹⁵ AB 357 (Ch. 947, Stats. 1981); BOE-sponsored provision to move alcohol fuels to the UFTL.

¹⁶ SB 654 (Ch. 950, Stats. 1981); added RTC Section 8651.8.

¹⁷ In general, the British Thermal Unit (BTU) is a traditional unit of energy:

http://en.wikipedia.org/wiki/British_thermal_unit

¹⁸ SB 146 (Ch. 875, Stats. 1993) made permanent the tax rate specified in RTC Section 8651.8. Assm.

Transportation Committee, SB 146 analysis, 08/27/93: http://www.leginfo.ca.gov/pub/93-94/bill/sen/sb_0101-0150/sb_146_cfa_930827_173346_asm_comm

¹⁹ United States Department of Energy, Energy Efficiency & Renewable Energy, Alternative Fuels Data Center, E85 Specification: http://www.afdc.energy.gov/fuels/ethanol_e85_specs.html

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.

- 5. Below-the-rack blenders sell the E85 with tax-paid gasoline and are authorized to obtain a refund.** As explained previously, below-the-rack blenders are already authorized to obtain a refund of the tax-paid gasoline component of the E85, as provided by law and as authorized by the SCO.
- 6. Technical suggestion.** Section 8651.8 should be amended to clarify that the \$0.09 use fuel tax is imposed on the blended ethanol fuel as follows:

8651.8. (a) Notwithstanding Section 8651, the excise tax imposed upon blended ethanol fuel, ethanol or methanol containing not more than 21 percent gasoline, ~~blended ethanol fuel~~, or diesel fuels shall be one-half the rate prescribed by Section 8651 for each gallon of fuel used.

(b) All references in this code to Section 8651 shall be deemed, with respect to the rate imposed upon blended ethanol fuel, ethanol, or methanol, to also refer to this section.

Administrative Costs: Costs to BOE would depend on the definition of blended ethanol fuel. The current ARB E85 regulation is consistent with the 21% blending percentage specified by this bill. Future blending percentage increases may range from 51% to 83% ethanol, which may cause as yet unknown administrative issues related to product verification. As explained in comment #3, the BOE does currently verify blended ethanol fuels. Potential future costs are unknown, but may be substantial.

Revenue Impact:

Background, Methodology, and Assumptions. This bill changes the definition of gasohol and increases the allowable percentage of gasoline blended into E85, from 15% to 21%, and current law allows reimbursement of that portion of the gasoline that was taxed prior to blending. Blending occurs by different processes, referred to as “above the rack” and “below the rack.” This variation requires different computations to calculate the “refund” impact for below the rack blenders, and a “foregone revenue” impact for above the rack blenders. To determine the “below the rack” revenue impact, the amount of ethanol reported is subtracted from the amount of E85 fuel reported. Multiplying the “below the rack” blend by either 15 or 21% yields the amount of gasoline eligible for refund. The difference between the two types of fuel blend for the corresponding fiscal years yields the difference in tax refund.

Blended fuel contains differing amounts of gasoline, from 15% (E85) to 21% (E79). Thus, as the amount of gasoline blended into E85 increases, the state experiences “foregone” revenue from the decreased ethanol revenues. Although the data indicates that most of the E85 blending occurs below the rack, not at the rack, for revenue estimate purposes we have attempted to quantify the above the rack impact. To the extent the industry changes production methods and volumes and blends more E85 at the rack, the revenue difference could grow.

Based on available data, a revenue loss is estimated as follows:

E85									
<i>fy</i>	<i>Blended Fuel E85</i>	<i>Blend Fuel Above Rack</i>	<i>Blend Fuel Below Rack</i>	<i>15% gasoline</i>	<i>Gasoline Rate</i>	<i>Refund</i>	<i>Ethanol Content</i>	<i>Ethanol Rate</i>	<i>Ethanol Revenue</i>
2011-12	5,827,381	197,742	5,629,639	844,446	0.357	\$ 301,467	4,785,193	0.09	\$ 430,667
2012-13	6,128,219	242,607	5,885,612	882,842	0.360	\$ 317,823	5,002,770		\$ 450,249
2013-14	7,958,169	132,869	7,825,300	1,173,795	0.395	\$ 463,649	6,651,505		\$ 598,635

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.

E79

<i>fy</i>	<i>Blended Fuel E85</i>	<i>Blend Fuel Above Rack</i>	<i>Blend Fuel Below Rack</i>	<i>21% gasoline</i>	<i>Gasoline Rate</i>	<i>Refund</i>	<i>Ethanol Content</i>	<i>Ethanol Rate</i>	<i>Ethanol Revenue</i>
2011-12	5,827,381	197,742	5,629,639	1,182,224	0.357	\$ 422,054	4,447,415	0.09	\$ 400,267
2012-13	6,128,219	242,607	5,885,612	1,235,979	0.360	\$ 444,952	4,649,634		\$ 418,467
2013-14	7,958,169	132,869	7,825,300	1,643,313	0.395	\$ 649,109	6,181,987		\$ 556,379

Revenue Summary. Accounting for both the “foregone” gasoline tax revenue and the increase in gasoline tax refunds yields a total revenue loss of \$150,987 in FY 2011-12, \$158,911 in FY 2012-13, and \$227,717 in FY 2013-14, which is computed as follows:

Fiscal Year	Refund Diff, Gasoline E85-E79	Foregone Revenue Diff.	Total Revenue Loss E85-E79
2011-12	\$ 120,587	\$ 30,400	\$150,987
2012-13	\$ 127,129	\$ 31,782	\$158,911
2013-14	\$ 185,460	\$ 42,257	\$227,717

This revenue estimate does not account for any changes in economic activity that may or may not result from enactment of the proposed law.